

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A wireless communication device of a wireless communication system having at least one slave device, and a single master device that is connected to the slave device and that has information of addresses allocated to the slave devices, the wireless communication device comprising:

a transceiving unit for receiving an external data, and transmitting a transmission-destined signal; and

a controller which, when the wireless communication device is operated as a slave device connected to the single master device and the slave device intends to communicate with another slave device, generates a packet where an address of a destination slave device received from the single master device through the transceiving unit is recorded in a destination address region, and transmits the packet through the transceiving unit to the destination slave device only through the single master device,

wherein the packet includes a destination address in a header region of the packet and a source address in a payload region of the pack.

2. (original): The device according to claim 1, wherein the controller records the address of the destination slave device in a header region of the packet.

3. (currently amended): A wireless communication device of a wireless communication system having at least one slave device, and a master device that is connected to the slave device

and that has information of addresses allocated to the slave devices, the wireless communication device comprising:

a transceiving unit for receiving an external data, and transmitting a transmission-destined signal; and

a controller which, when the wireless communication device is operated as a slave device connected to the master device and the slave device intends to communicate with another slave device, generates a packet where an address of a destination slave device received from the master device through the transceiving unit is recorded in a destination address region, wherein the destination region is in a header region of the packet, and transmits the packet through the transceiving unit to the destination slave device through the master device,

wherein the controller records a source address in a payload region of the packet.

4. (original): The device according to claim 3, wherein the source address is allocated by the master device.

5. (currently amended): A wireless communication device of a wireless communication system having at least one slave device, and a master device that is connected to the slave device and that has information of addresses allocated to the slave devices, the wireless communication device comprising:

a transceiving unit for receiving an external data, and transmitting a transmission-destined signal; and

a controller which, when the wireless communication device is operated as a slave device connected to the master device and the slave device intends to communicate with another slave device, generates a packet where an address of a destination slave device received from the

master device through the transceiving unit is recorded in a destination address region, and transmits the packet through the transceiving unit to the destination slave device through the master device,

wherein the addresses are active member addresses which the master device allocates to distinguish the connected slave devices, and

wherein the packet includes a destination address in a header region of the packet and a source address in a payload region of the packet.

6. (currently amended): A wireless communication device of a wireless communication system having at least one slave device, and a master device that is connected to the at least one slave device and that has information of addresses allocated to the at least one slave device, the wireless communication device comprising:

a transceiving unit for receiving an external data, and transmitting a transmission-destined signal; and

a controller which, when the wireless communication device is operated as a master device connected to the at least one slave device, reads a packet received directly from said at least one slave device via the transceiving unit and transmits the packet directly to a corresponding slave device through the transceiving unit if there is an address of the corresponding slave device recorded in a destination address region of the packet,

wherein the packet includes a destination address in a header region of the packet and a source address in a payload region of the packet.

7. (currently amended): The device according to claim 6, wherein the controller recognizes the address recorded in ~~a~~ the header region of the packet as the destination address.

8. (currently amended): A wireless communication device of a wireless communication system having at least one slave device, and a master device that is connected to the slave device and that has information of addresses allocated to the slave devices, the wireless communication device comprising:

a transceiving unit for receiving an external data, and transmitting a transmission-destined signal; and

a controller which, when the wireless communication device is operated as a master device connected to at least one slave device, reads the packet received from the transceiving unit and transmits the packet to the corresponding slave device through the transceiving unit if there is an address of the slave device recorded in a destination address region of the packet,

wherein the controller recognizes the address recorded in a payload region of the packet as an address of the transmission slave device,

wherein the packet includes a destination address in a header region of the packet and the source address in the payload region of the packet.

9. (currently amended): A wireless communication system having at least one slave device, and a master device that is connected to the slave device and that has information of addresses allocated to the slave devices, the slave device obtaining an address of the destination slave device from the master device, generating a packet including the address of the destination slave device as a destination address in a header region of the packet and the address of the slave device as a source address in a payload region of the packet, and transmitting the packet to the master device, and the master device reading the received packet, and transmitting the packet to the slave device of the destination address, when the address recorded in a destination address

region of the packet is the address of the slave device.

10. (original): The system according to claim 9, wherein the slave device records the address of the destination slave device in a header region of the packet, and the master device recognizes the information recorded in the header region of the packet as the destination address.

11. (currently amended): A wireless communication system having at least one slave device, and a master device that is connected to the slave device and that has information of addresses allocated to the slave devices, the slave device obtaining an address of the destination slave device from the master device, generating a packet including the address of the destination slave device as a destination address and the address of the slave device as a source address, wherein the packet includes the destination address in a header region of the packet and the source address in the payload region of the packet, and transmitting the packet to the master device, and the master device reading the received packet, and transmitting the packet to the slave device of the destination address, when the address recorded in a destination address region of the packet is the address of the slave device,

wherein the slave device records its source address in ~~a~~the payload region of the packet.

12. (original): The system according to claim 9, wherein the address is an active member address which the master device allocates to distinguish the respective slave devices.

13. (currently amended): A communication method for a wireless communication system having at least one slave device, and a master device that is connected to the slave device and that has information of addresses allocated to the slave devices, the method comprising the steps of:

obtaining an address of the destination slave device from the master device;

generating a packet including the address of the destination slave device as a destination address and the address of the slave device as a source address; and

transmitting the packet to the master device so that the packet can be transmitted to the destination slave device through the master device according to the destination address recorded on the packet,

wherein the packet includes the destination address in a header region of the packet and the source address in the payload region of the packet.

14. (original): The method according to claim 13,
wherein the address of the destination slave device is recorded in a header region of the packet.

15. (currently amended): A communication method for a wireless communication system having at least one slave device, and a master device that is connected to the slave device and that has information of addresses allocated to the slave devices, the method comprising the steps of:

obtaining an address of the destination slave device from the master device;

generating a packet including the address of the destination slave device as a destination address in a header region of the packet and the address of the slave device as a source address in a payload region of the packet; and

transmitting the packet to the master device so that the packet can be transmitted to the destination slave device through the master device according to the destination address recorded on the packet,

wherein the address of the transmission slave device is recorded in ~~a~~ the payload region

of the packet.

16. (original): The method according to claim 13, wherein the address is an active member address which the master device allocates to distinguish the respective slave devices.

17. (currently amended):): A communication method for a wireless communication system having at least one slave device, and a master device that is connected to the at least one slave device and that has information of addresses allocated to the at least one slave device, the method comprising:

the master device analyzing a packet received directly from a first slave device; and

the master device transmitting the packet directly to a second slave device of a destination address, when an address recorded in a destination address region of the packet is the address of the second slave device,

wherein the packet includes the destination address in a header region of the packet and a source address in the payload region of the packet.

18. (original): The method according to claim 17, wherein the master device performs the analyzing and transmitting steps.